

Title (en)

WATER REPELLENT AND PRODUCTION PROCESS THEREFOR

Title (de)

WASSERABWEISENDES MITTEL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

AGENT D'HYDROFUGATION, ET PROCÉDÉ DE FABRICATION DE CELUI-CI

Publication

**EP 3460021 B1 20230628 (EN)**

Application

**EP 17799156 A 20170427**

Priority

- JP 2016098727 A 20160517
- JP 2017016813 W 20170427

Abstract (en)

[origin: EP3460021A1] The present invention addresses the problem of providing a fluorine-free water repellent which can impart excellent initial water repellency and laundering-resistant water repellency to fibers of a wide range of kinds. The water repellent treatment agent is an aqueous emulsion which contains no fluorine-containing ingredient and comprises a hybrid emulsion that contains a water repellent component and a crosslinking component capable of reacting with the water repellent component, the two components being included in each particle. It is preferable that the crosslinking component be a blocked isocyanate. It is preferable that the water repellent component and the crosslinking component be contained in amounts of 20-90 mass% and 10-80 mass%, respectively, based on the solid components of the water repellent treatment agent.

IPC 8 full level

**C08G 18/80** (2006.01); **C09K 3/18** (2006.01); **D06M 13/02** (2006.01); **D06M 13/395** (2006.01); **D06M 15/263** (2006.01); **D06M 15/564** (2006.01); **D06M 15/568** (2006.01); **D06M 15/643** (2006.01); **D06M 15/65** (2006.01)

CPC (source: EP KR)

**C08G 18/80** (2013.01 - EP KR); **C09K 3/18** (2013.01 - EP KR); **D06M 13/02** (2013.01 - EP KR); **D06M 13/395** (2013.01 - EP KR); **D06M 15/263** (2013.01 - EP); **D06M 15/564** (2013.01 - EP KR); **D06M 15/568** (2013.01 - EP); **D06M 15/643** (2013.01 - EP KR); **D06M 15/6433** (2013.01 - EP); **D06M 15/6436** (2013.01 - EP); **D06M 15/65** (2013.01 - EP); **D06M 15/651** (2013.01 - EP); **D06M 15/652** (2013.01 - EP); **D06M 2200/12** (2013.01 - EP KR)

Cited by

EP4036304A1; EP4163350A4; US11746466B2; US11486088B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3460021 A1 20190327**; **EP 3460021 A4 20191225**; **EP 3460021 B1 20230628**; CN 109153908 A 20190104; CN 109153908 B 20211224; JP 6272588 B1 20180131; JP WO2017199726 A1 20180531; KR 102188425 B1 20201208; KR 20180132897 A 20181212; TW 201819589 A 20180601; TW I704217 B 20200911; WO 2017199726 A1 20171123

DOCDB simple family (application)

**EP 17799156 A 20170427**; CN 201780029893 A 20170427; JP 2017016813 W 20170427; JP 2017549353 A 20170427; KR 20187033313 A 20170427; TW 106114477 A 20170502